

NC ELECTRIC RATES AND JOB RETENTION

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ON BEHALF OF CAROLINA UTILITY CUSTOMERS ASSOCIATION (CUCA)

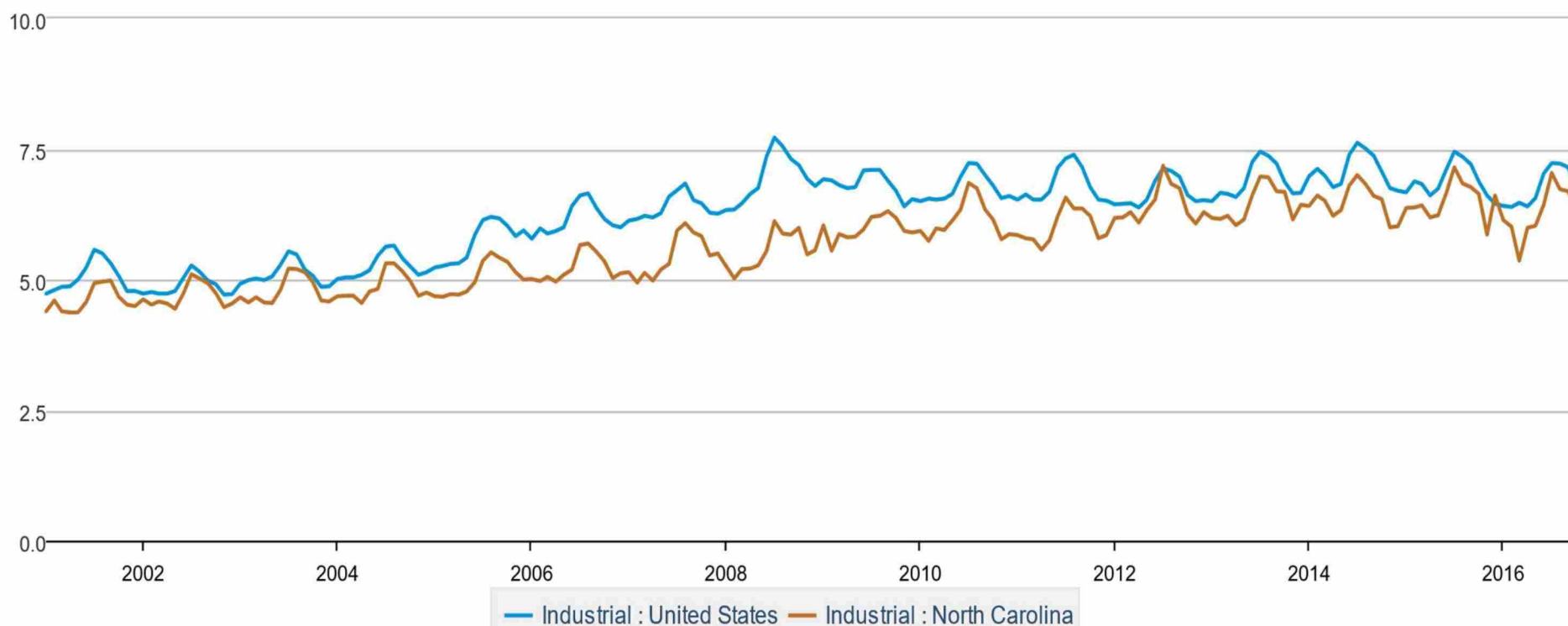
FEBRUARY 17, 2017

2 US AND NC AVERAGE ELECTRIC PRICES BY MONTH

Average retail price of electricity, monthly

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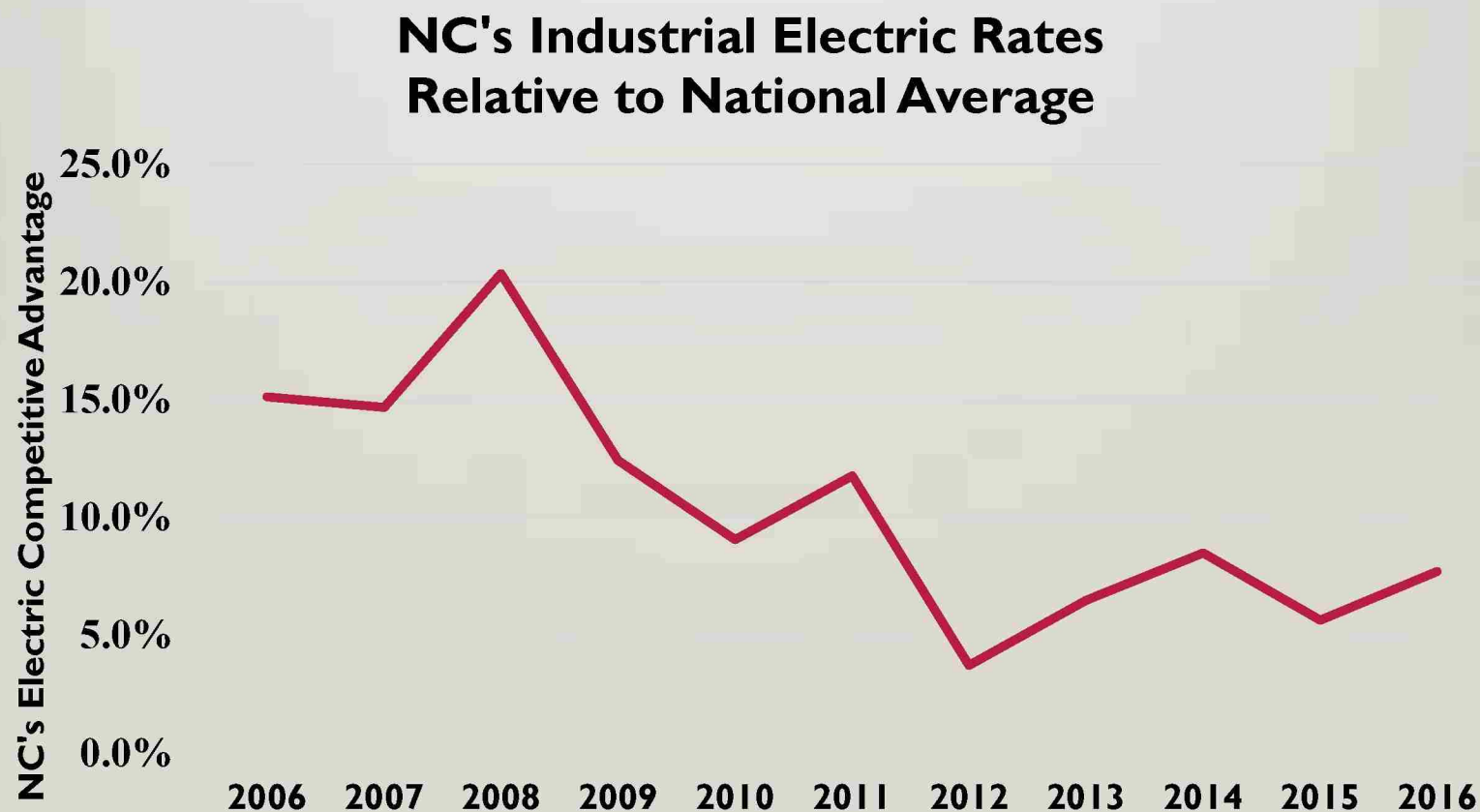
cents per kilowatthour



Data source: U.S. Energy Information Administration

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ERODING COST ADVANTAGE?



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HOW DO NC IND. RATES COMPARE TO OTHER SOUTHEASTERN STATES?

Year	US	Georgia	NC	SC	Virginia	Alabama
2016	6.75	5.65	6.23	5.98	6.71	6.04

Note: Monthly average costs through November
costs are cents/kWh

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DUKE'S GRID MODERNIZATION COST RATE INCREASES

Customer Class	Utility	
	DEC	DEP
Residential	52.50%	48.74%
Commercial	12.45%	40.38%
Industrial	29.89%	8.94%

1. P. 12 of Duke Presentation of 2-10-17 calls for 10-year grid program
2. Above stated rate increases are 10-year cumulative increases from the year-over-year increases cited by Duke in its 2-10-17 presentation

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WHAT DO THESE RATE INCREASES MEAN TO TYPICAL CONSUMERS?

Customer Class	Duke Carolinas Proposed Rate Increases	Duke Progress Proposed Rate Increases
Residential (1,100 kWhs/mo)	\$782	\$726
Commercial (500 kW, 70% LF)	\$33,315	\$108,082
Industrial (20 MW, 85% LF)	\$2,898,144	\$866,761

Above cost increases do NOT include additional generating plant investment or coal ash costs. The addition of these other costs will drive rates higher than those stated above.

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Q. WHY ARE GRID UPDATES NEEDED?

A. TO IMPROVE RELIABILITY

SAIDI is defined as the average duration of interruptions for customers served during a specified time period.

SAIFI is the average number of interruptions that a customer would experience

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ARE UPGRADES NEEDED?

Year	Without MEDS (Major Event Days)				Year	With MEDS			
	DEC		DEP			DEC		DEP	
	SAIFI	SAIDI	SAIFI	SAIDI		SAIFI	SAIDI	SAIFI	SAIDI
2013	0.92	133	1.24	106	2013	1.15	247	1.67	277
2014	0.94	138	1.22	124	2014	1.30	606	1.86	469
2015	0.99	143	1.41	141	2015	1.17	213	1.72	275
2016	1.07	170	1.30	153	2016	1.37	338	2.57	1790

Data taken from Duke filings in NCUC Docket No. E-100, Sub 138A



Report on the NCTPC 2016-2026 Collaborative Transmission Plan

**January 13, 2017
Final Report**



North Carolina Transmission Planning Collaborative

2016 Collaborative Transmission Plan – Reliability Projects (Estimated Cost > \$10M)							
Project ID	Reliability Project	Issue Resolved	Status ¹	Transmission Owner	Projected In-Service Date	Estimated Cost (\$M) ²	Project Lead Time (Years) ³
0024	Durham - RTP 230 kV Line, Reconductor	Address loading on the Durham - RTP 230 kV Line	Planned	DEP	6/1/2025	15	4
0028	Brunswick #1 – Jacksonville 230 kV Line Loop-In to Folkstone 230 kV Substation	Address loading on Castle Hayne - Folkstone 115 kV Line	Planned	DEP	6/1/2024	14	4
0030	Raeford 230 kV substation, loop-in Richmond - Ft Bragg Woodruff St 230 kV Line and add 3rd bank	Address loading on Raeford 230/115 kV transformer	Planned	DEP	6/1/2018	16	1 5
0031	Jacksonville - Grants Creek 230 kV Line and Grants Creek 230/115 kV Substation	Mitigate loading and voltage issues on existing Havelock - Jacksonville 230 kV Line	Planned	DEP	6/1/2020	31	3 5
0032	Newport - Harlowe 230 kV Line, Newport SS and Harlowe 230/115 kV Substation	Mitigate loading and voltage issues on existing Havelock - Morehead Wildwood 115 kV Line	Planned	DEP	6/1/2020	30	3 5
0033	Fort Bragg Woodruff St 230 kV Sub, Replace 150 MVA 230/115 kV transformer with two 300 MVA banks & reconductor Manchester 115 kV feeder	Mitigate transformer bank and 115 kV feeder loading	Underway	DEP	12/1/2016	19	5
0034	Sutton - Castle Hayne 115 kV North line Rebuild	Mitigate contingency loading	Underway	DEP	6/1/2019	9	2 5



North Carolina Transmission Planning Collaborative

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Project ID	Reliability Project	Issue Resolved	Status ¹	Transmission Owner	Projected In-Service Date	Estimated Cost (\$M) ²	Project Lead Time (Years) ³
0036	Asheville Plant, Replace 2-300 MVA 230/115 kV banks with 2-400 MVA banks, reconductor 115 kV ties to switchyard, upgrade breakers, and add 230 kV capacitor bank	Transmission required to interconnect two 1x1 combined cycle generating units	Planned	DEP	12/1/2019	30	3.5
0037	Cane River 230 kV Substation, Construct 150 MVAR SVC	Transmission required to interconnect two 1x1 combined cycle generating units	Planned	DEP	12/1/2019	30	3.5
0038	Reconductor Harley 100 kV Lines (Tiger - Campobello)	Mitigate contingency loading	Planned	DEC	6/1/2021	20	4
TOTAL						214	

¹ Status. *Underway*: Projects with this status range from the Transmission Owner having some money in its current year budget for the project to the Transmission Owner having completed some construction activities for the project. *Planned*: Projects with this status do not have money in the Transmission Owner's current year budget, and the project is subject to change.

² The estimated cost is in nominal dollars which reflects the sum of the estimated annual cash flows over the expected development period for the specific project (typically 2 – 5 years), including direct costs, loadings and overheads, but not including AFUDC. Each year's cash flow is escalated to the year of the expenditures. The sum of the expected cash flows is the estimated cost.

³ For projects with a status of Underway, the project lead time is the time remaining to complete construction and place in-service.

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WHAT HAS CHANGED?

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- One month ago the NC Transmission Collaborative found \$214 million in transmission upgrades over the next 10 years.
 - Last week Duke indicated it needed \$10 billion for transmission and distribution upgrades.
 - **What has changed in the course of the past month?**

SUMMARY

- Duke should provide **evidence** that upgrades are needed and the costs are over-and-above what is already built into rates. For example, what is the SAIDI/SAIFI goal through these upgrades and how much will it cost to achieve those goals? Is the cost worth the benefits?
- Duke should provide details as to why a **rider** should be established that would avoid the normal NCUC rate case review process.
- Compare Duke's 2016 Smart Grid Technology Plan/Associated Costs filed at the NCUC on 10-3-16 relative to \$10 billion request last week.

SUMMARY (CONT.)

- Consumers need cost caps and certainty.
- NC's industrial rates are losing their competitive advantage.
- Indeed, NC's industrial costs are high relative to other southeastern states.
- Manufacturers and other consumers cannot afford the rate increases suggested by Duke for grid modernization

SUMMARY (CONT.)

- Duke's proposed cost increases would raise the annual power bill for the typical North Carolinian by over \$700. The typical manufacturer would pay \$1 million to \$3 million more per year.
- **Any proposal that includes rate increases of the magnitude in the Duke plant investment rider is an economy and jobs killer in the state.**